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## TILES HISTORICALLY CONSIDERED.

BY CARYL COLEMAN.

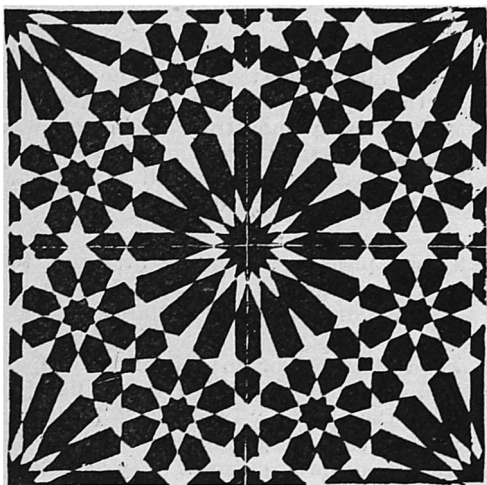
PART II., CONTINUED.

AS soon as the Arabs subjected one country they looked about, turning their eyes here and there for new fields of conquest. Nothing dismayed, nothing stopped them—mountains, rivers, deserts, all were crossed until the banner of Islam waved in triumph over Persia, Syria, Egypt, and again the faithful marched forth to battle, stimulated by religious enthusiasm, conquering one people after another, until they were masters of a good part of Asia, Africa, and Europe, one Caliph ruling the Mohammedan world from Sindh in India to Cordova in Spain.

As fast as the Arabs—victorious Islamism—made the natives of these lands disciples of Mohammed, they built mosques and palaces after the manner of the Persians, overlaying them with tiles—the floors, walls, ceilings and domes.

The buildings of Talemén, Keiroman, Constantiné, Fez, Morocco and the Moorish edifices in Spain show forth even to this day the beauty of this polychromatic decoration, made by the artistic use of brilliantly glazed and painted tiles, rivaling in their splendor the ancient palaces of Nineveh and Babylon.

It would be a curious, instructive, and profitable study to trace the evolution of ceramic decoration step by step along the Barbary coast, from Tripoli around to Mogador, and from thence into Spain, uniting the chain that holds the art of far-off Persia to that of the Moorish potter of Granada, but at present this picking up and putting together the missing links of this chain is impossible from the lack of sufficient data, travelers and archæologists having given very little thought to this subject, their minds and observation having



DADO TILE, VILLA OF THE GENERALIFE, GRANADA.

been, for the greater part, taken up by the study of and the search for vestiges of the Phœnicians and the Romans.

At first the African or Maghreb Mussulman brought their tiles from Persia and Asia Minor, later they established potteries of their own which have continued in Morocco to our time. For a long while they did nothing but imitate the Persian tiles, but their colors were never so pure and rich in tone, the glaze was thin and easily detached, the drawing weak, but at last they produced a new tile strictly their own. It was larger than those they had for models, faced with a white glaze of great fluidity and covered with scrolls of a floral nature in the clearest of tints.

The Mohammedans having made the North of Africa theirs, they invaded the Spanish Peninsula in the year 711, but did not become builders until the establishment of the Caliphate at Cordova A.D. 756, from that time on until the expulsion of the Moors, they covered the land with edifices of great magnificence. Mosque and palace springing into being at the command of caliphs of unbounded wealth, the Persian and the Byzantine architect aiding the Spanish Arabs and Moors by their taste and knowledge to make them truly things of beauty.

For a caliph like Abd-er-Rahman, the builder of the great palace of Zahra, nothing was too costly, no material too precious to use or lavish upon his royal retreat amid whose splendor he only found the nothingness of human grandeur and exclaimed: "*O man! put not your trust in this world.*"

How far or how extended in these buildings the use of tiles may have been or just where or when they were first used it is hard to say, yet we may believe, judging from the ruins still standing of those once splendid but ephemeral

structures, that tiles were imported at the beginning by the Arabs and used largely, and that after the founding of the Moorish Kingdom of Granada tileries were erected in Spain and tiles more extensively employed for surface decoration.

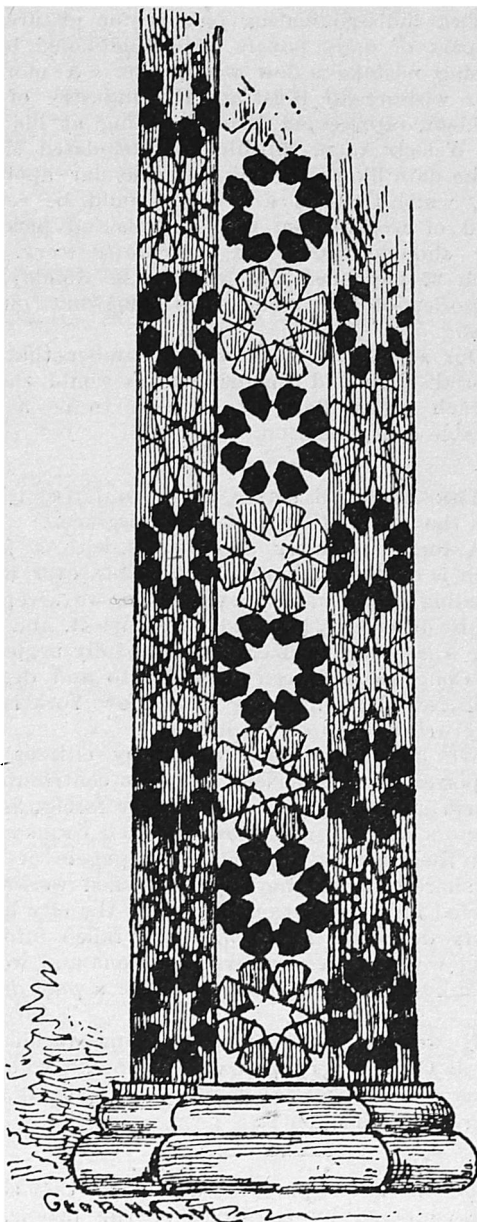
That form of tile called azulejos were the first manufactured, they were made by rolling a bat of clay into a thin sheet about half an inch thick, then cut up into one or more geometric forms, that would work or combine with one another in such a way as to form a design or pattern, the face covered with colored siliceous glaze, the edges beveled back from the face to form a key for the mortar when the tile was to be fixed to the wall, and lastly subjected to one firing only, the bisque and the color being developed together. This kind of tile, for they were always small, took the place of mosaic work, and were principally used in dados.

The Moors were most ingenious in discovering or working out forms for them of such a nature that by only changing the color of the tile one form even could be combined with itself so as to make a variety of patterns. The dados between the windows of the Hall of the Ambassadors in the Palace of the Alhambra are all different in design and yet they are made with the same six forms.

These azulejos are still made in Spain, but the Spanish potter, having lost the cunning of his teacher, the Moor, the tiles are crude and inartistic in color.

An Englishman, Mr. Henry Pether, in 1839 invented machinery with which to cut them out of thin layers of clay, and for a time they were made in this way by Mr. Singer at Vauxhall Pottery, London, but it was left, as we will see later on, for an American—Mr. John G. Low—to invent a machine in which to make them from clay dust and to once more bring them into general use for fine dado work.

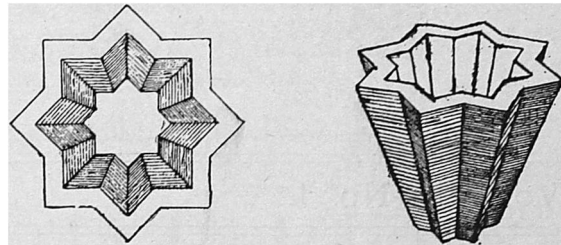
In addition to the above kind of tiles, the Moors had another sort which they not only used on the walls but floors as well. They were made of wet clay three-quarters of an inch thick, cut into squares or oblong pieces of diverse sizes (3 x 3 to 6 x 6, or 11 x 4 to 1 x 8), on the face a pattern was indented and the whole fired for the bisque, which was then glazed with a white glaze made of lead, tin, and sand from a cave at Benalguacil, together with finely powdered salt; after a second firing the indentations were filled with pure lustre colors and fired for the third and last time. Imitation of these tiles are now made



COLUMN FROM THE ALHAMBRA, COVERED WITH AZULEJOS.

in Spain, England, and America, but those of Mr. Girard of London are the only ones that approach in beauty of color the originals, and even they, good as they are, fall short, more especially in luster.

Hand-painted tiles, almost the same as the Persian, were made by the Moors, but it was not until the sixteenth century and in the hands of the Spanish potters, under the influence of the Italian Renaissance school of decorators, that they reached any great excellence. The finest example of this species of tile in all Spain is the tile decorations at Seville in the chapel of the Alcazar

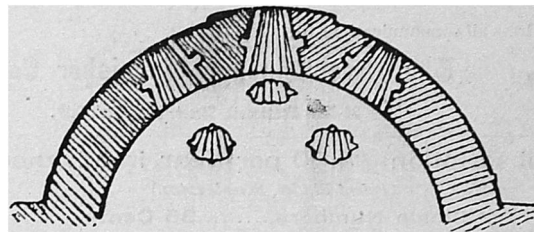


END AND UPRIGHT SECTION OF HOLLOW ILLUMINATING TILES.

painted by an Italian, Nicholas Francisco; they are wonderful in color and most beautiful in design, somewhat in the manner of Perugino.

Of all the tiles made by the Moors, the most novel ones were those used to line the star-like openings in the domed ceilings of the baths in the Alhambra. By means of these openings light was admitted to the apartment, and as it passed through the tile tube it threw into the room a colored light reflected from their highly glazed surfaces.

The Moorish roofing tiles were beautiful, not only for their color but because the color was



SECTION OF DOME, SHOWING APPLICATION OF ILLUMINATING TILES.

metallic and wonderfully iridescent under the strong sun of Spain. Their floor tiles were hard, more so than any of their others, the glaze was largely tin, the ground usually white cover with a design in blue or brown.

After the fall of Granada the Spaniards became tile makers, learning the art from the Moors, and they have continued to our day not only to make tiles for their own consumption, but export them to South and Central America, the West Indies and Mexico, and of late have become competitors with the English and American makers in the New York market.

So great became the use of tiles in Spain that they were used in almost every church, convent, and private house, to adorn altars, roofs, walls, and floors, and so important the manufacture that the crown appointed from time to time a master tile maker (Maestro Azulejero) for all Spain.

(To be continued.)

THE Casino is as successful as it is a beautiful playhouse. It is as successful, moreover, as the men who risked giving New York so delightful a departure from the cut and dried rules of theatre building deserved their venture to be. Inside and out, the eye rests with charmed gratitude upon its odd beauties, so different from and so superior to what the eye generally rests on in a New York theatre. There are a score of pictures in and around the Casino, waiting for the painter. The audience coming out, down its grand staircase under the electric lights, is a superb subject. I wonder someone has not made a newspaper picture of it before now, or do our wise editors look on it as too much of an advertisement for the house?

TO APPLY GOLD TO WHITE EARTHENWARE AND GLASS.—Draw design on article with Japanese gold size, and moisten it, if this be necessary, with oil of turpentine. Set the work in a room free from dust to dry, for an hour; then place it for a few seconds so near a fire that you can just bear the heat with your hands. On the now slightly clammy surface lay gold leaf in the usual way. Then bake the ware in oven for three hours. Glass is gilt by drawing the figures with shell gold mixed with gum arabic and borax.